

**REMARKS**

Claims 1-6 and 8-13 are pending in this application. By this Amendment, claim 7 is cancelled and claims 4 and 6 are amended. Support for the amendments to the claims may be found, for example, in the original claims. No new matter is added.

In view of the foregoing amendments and following remarks, reconsideration and allowance are respectfully requested.

**I. Rejections Under 35 U.S.C. §102(b)**

The Office Action rejects claims 1 and 8-13 under 35 U.S.C. §102(b) as anticipated by either JP 63-256701 ("701"), JP 6-58931 ("931"), or U.S. Patent No. 5,947,945 to Cree et al. ("Cree"). Applicants respectfully traverse the rejection.

It is well settled that a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *See* MPEP §2131.

Claim 1 requires "a by-pass channel member which has a channel for moving the aqueous liquid fed to a surface of a first super-absorbent sheet positioned uppermost in the laminated absorbent member from the surface of the first super-absorbent sheet to another super-absorbent sheet, wherein the side to be fed with the aqueous liquid in the laminated absorbent member is assumed to be an upper side." '701, '931 and Cree fail to teach or suggest such features and, in particular, the by-pass channel member.

The Advisory Action asserts that the element of the by pass channel is equivalent to "non-woven sheet" of the cited art. In particular, the Advisory Action alleges that the "non-woven sheet...can be considered a channel member in its broadest sense since it has opening therein which would allow fluid material to pass here through." *See* Advisory Action, continuation sheet. Applicants respectfully submit that the Office Action's interpretation of the term "by-pass channel" is unreasonably broad as it is not consistent with the specification.

MPEP §2111 sets forth the standard established for claim interpretation during examination:

During patent examination, the pending claims must be "given their broadest reasonable interpretation consistent with the specification." >The Federal Circuit's *en banc* decision in *Phillips v. AWH Corp.*, 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005) expressly recognized that the USPTO employs the "broadest reasonable interpretation" standard:

The Patent and Trademark Office ("PTO") determines the scope of claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction "in light of the specification as it would be interpreted by one of ordinary skill in the art." *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364[, 70 USPQ2d 1827] (Fed. Cir. 2004). Indeed, the rules of the PTO require that application claims must "conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description." 37 CFR 1.75(d)(1).  
[emphasis added]

Thus, the MPEP clearly establishes that during examination, the claims are to be given their "broadest reasonable interpretation" in light of the specification as it would be interpreted by one of ordinary skill in the art, and not solely on the basis of the claim language. Case law cited in MPEP §2111 explains that "reading a claim in light of the specification, to thereby interpret limitations explicitly recited in the claim, is a quite different thing from 'reading limitations of the specification into a claim,' to thereby narrow the scope of the claim by implicitly adding disclosed limitations which have no express basis in the claim" (emphasis added). *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969). Although the PTO is not required to interpret claims in the same manner as a court would interpret the claims in an infringement suit, the PTO is required to apply to the verbiage of the proposed claims "the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into

account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in applicant's specification" (emphasis added). *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997).

The Office Action construes the term "by-pass channel" as if it simply recites the term "channel," completely disregarding the term "by-pass" and the arguments presented in the Request for Reconsideration After Final Rejection ("Request") filed August 15, 2007. However, the Office Action cannot simply disregard a claimed feature where there is no basis in the Applicants' disclosure to interpret such a feature so broadly as if it did not exist. It is clear from the disclosure, and clear from the arguments presented in the Request, that the term "by-pass channel" is not just a simple channel, pore, or aperture as asserted by the Office Action. Even without the disclosure, one of skill in the art would associate with the term "bypass" some sense of circumvention or means for circumventing. The specification and Figures only further strengthen and support this notion.

For example, Figures 3(A) through 3(E) exemplify five different ways that aqueous liquid may be moved to different layers of an absorber by use of a by-pass channel member. The specification teaches "providing a by-pass channel member for by-passing from the uppermost surface layer to the lower layers in an absorber composed by laminating super-absorbent sheets in multiple layers, to realize an absorber that fully cope with the flow speed of the aqueous liquid into it and furthermore achieves a faster absorbing speed than that of the conventional thick absorber..." and that "the absorber of the present invention can achieve an extremely high absorbing speed by utilizing the absorbing capability of multiple layers, wherein an aqueous liquid fed to the first super-absorbent sheet of the laminated super-absorbent sheets in multiple layers, i.e., the super-absorbent sheet positioned closest to a wearer's side when it is worn by the wearer, is distributed to other layers via the by-pass channel member." See pages 5 and 6. In other words, the disclosed invention provides by-

pass members that divert a portion of a volume of aqueous liquid from the upper surface of a first layer of an absorber to one or more other layers of the absorber. Accordingly, the diverted portion of the liquid moves past the first layer at a rate that is faster than the rate of the non-diverted portion of the liquid which permeates through the first layer. Therefore, embodiments according to the disclosed invention are configured with by-pass members to allow multiple super absorbent layers to almost simultaneously handle a given volume of aqueous liquid, resulting in much higher absorbing speeds than those achieved by the prior-art devices.

Neither '701, '931 nor Cree teach or suggest such features. In particular, '701 teaches that when urine moves from the second fluff pulp 4 to the first fluff pulp 7, all of urine must pass through the intermediate non-woven sheet 5 before arriving at the first fluff pulp. *See* Figure 1.

'931 teaches that when urine moves from the first absorber layer 2 to the second absorber layer 4, all of the urine must pass through the middle sheet 3 before arriving at the second absorbing layer. *See* Figure 2.

Similarly, Cree discloses, "[t]he core 16 is comprised of three parts each having distinct properties. The first part, closest to the body is the acquisition layer 22. It contacts the fluid. Then the second layer, the transfer or distribution layer 20 transports the fluid to the third layer, the storage layer 18." *See* column 3, lines 38-42. Accordingly, the transfer layer 20 transports the fluid from the inside of the acquisition layer 22 to the storage layer 18. Therefore, Cree fails to teach or suggest a "by-pass channel member," as claimed.

Therefore, neither '701, '931, nor Cree teach or suggest "a by-pass channel member," as required by independent claim 1.

With respect to claim 8, the Office Action asserts that "applicant themselves recite the channel member is at least a non-woven sheet in claim 8." *See* Advisory Action, continuation

sheet. Applicants respectfully disagree with this assertion. Although, claim 8 requires that "at least a part of the by-pass channel member is composed of a non-woven sheet member," it does not mean that any non-woven sheet corresponds to the by-pass channel member. Indeed, as previously illustrated above in the discussion of '701, '931 and Cree, a non-woven sheet in and of itself does not correspond to the by-pass channel member of the claimed invention.

Therefore, neither '701, '931, nor Cree teach or suggest a by-pass channel member in accordance with claim 1, and do not anticipate claim 1. Claims 8–13 variously depend from claim 1 and, thus, also are not anticipated by either '701, '931 or Cree. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

## **II. Rejection Under 35 U.S.C. §103**

The Office Action rejects claims 2–7 under 35 U.S.C. §103(a) over '701, '931, or Cree in view of applicant's alleged discussion of prior art ("ADPA") and U.S. Patent No. 4,323,069 to Ahr et al. ("Ahr"). By this Amendment, claim 7 is cancelled rendering its rejection moot. Applicants respectfully traverse the rejection as to claims 2-6.

For the reasons discussed above, '701, '931, and Cree fail to teach or suggest all of the features of independent claim 1. ADPA and Ahr are only cited for the features of the dependent claims. Regardless, of its asserted disclosures, ADPA and Ahr do not cure the deficiencies of '701, '931, and Cree.

The Office Action asserts that "the primary reference teaches the invention substantially as recited except for the specific materials of the absorbent layer per claims 2 and 3, the tube per claims 4 and 5 and the undulating sheet per claims 6 and 7." *See* Office Action page 4, no.7. By this Amendment, claim 6 is amended to incorporate the subject matter of claim 7.

Claim 6, as amended requires that "wherein at least a part of the by-pass channel member is composed of a concavity-and-convexity-containing sheet member that has a

concavity-and-convexity-containing surface with concave portions and convex portions on at least one surfaces thereof; the concavity-and-convexity-containing sheet member has apertures in some of or in all of the convex portions; a part of the concavity-and-convexity-containing sheet member is positioned above the first super-absorbent sheet with the concavity-and-convexity-containing surface facing upward; and another part of the concavity-and-convexity-containing sheet member is positioned either above another super-absorbent sheet or under the laminated absorbent member or both."

The Office Action asserts that because ADPA discloses "that the absorbent layers are known" and because Ahr discloses "an undulating sheet with apertures core 16" it would have been obvious to arrive at claim 6. It is respectfully submitted that the combination of ADPA and Ahr with '701, '931, and Cree would not have rendered claim 6 obvious.

Ahr discloses an intermediate layer 40 which has a plurality of tapered capillaries 42 placed as concavity-and-convexity-containing surface (i.e., surface having apex openings 46) facing downward. *See* column 11, lines 53-57 and Figs. 2-5. Therefore, a large portion of the aqueous liquid passes through apex openings 46 to the backside of the intermediate layer 40.

Ahr's intermediate layer 40 is clearly distinguishable from the concavity-and-convexity-containing sheet member of amended claim 6 in its construction and function. In particular, as claimed in claim 6, the concavity-and-convexity-containing sheet member has apertures in some of or in all of the convex portions and a part of the concavity and convexity containing sheet members is positioned above the first super-absorbent sheet with the concavity and convexity containing surface facing upward. A portion of the aqueous liquid passes through the apertures to the backside of the concavity and convexity containing sheet member. However, a portion of the aqueous liquid moves to another super absorbent sheet by the bypass channel member formed by slopes of the convex portion. The intermediate layer of Ahr is clearly different from the concavity and convexity sheet member of claim 6 in both

its construction and function in which the aqueous liquid, as previously discussed, passes through apex openings to the backside of the intermediate layer.

Claim 4 is also clearly not obvious over the combination of '701, '931, and Cree in view of ADPA and Ahr. None of the cited references independently or in combination teach or suggest a by-pass channel member, and more particular, as claimed in claim 4, a by-pass channel member which is at least partially composed of a tube member. Specifically, claim 4 recites a tube member that has a channel inside, an entry end portion formed by positioning one end of the tube member above the first super-absorbent sheet, or by positioning the end of the tube member such that an end portion of the first super-absorbent sheet is inserted in the channel; and an exit end portion formed by positioning the other end of the tube member either above another super-absorbent sheet or under the laminated absorbent member or both, or by positioning the other end of the tube member such that at least one end of another super-absorbent sheet is inserted in the channel. In this regard, Ahr's teaching of "an undulating sheet with apertures core" is not the same as or suggestive of the very different structure of the tube member recited by claim 4.

For at least the reasons discussed above, '701, '931, Cree, ADPA, and Ahr, considered either separately or in combination, fail to teach or suggest all of the features of independent claim 1.


Claim 1 would not have been rendered obvious by '701, '931, Cree, ADPA, and Ahr. Claims 2-7 depend from claim 1 and, thus, also would not have been rendered obvious by '701, '931, Cree, ADPA, and Ahr. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

**III. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

  
James A. Oliff  
Registration No. 27,075

Julie Tabarovsky  
Registration No. 60,808

JAO:JXT

Date: October 1, 2007

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
**Alexandria, Virginia 22320**  
**Telephone: (703) 836-6400**

<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
--